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QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

By

  
Amelia Weintraub

Attorney Docket No. 305J-900320US  
Client Ref. No. SF2000-012-3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ilse Bartke, et al.

Application No.: 09/854,142

Filed: May 10, 2001

For: NGF FOR THE PREVENTION OF  
DEMYELINATION IN THE  
NERVOUS SYSTEM

Examiner: Jon P. Weber

Art Unit: 1651

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR § 1.97 and  
§ 1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

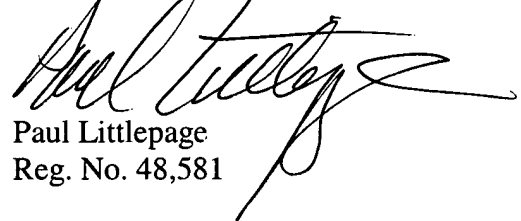
The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Also enclosed is a copy of the 1449 submitted on December 30, 2002, the first page of which has not yet been signed by the examiner. Copies of these references were previously submitted at the time of filing said IDS and are therefore not included in this mailing.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action on the merits per 37 CFR 1.97(b)(3). However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Paul Littlepage  
Reg. No. 48,581

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.  
P.O. BOX 458  
Alameda, CA 94501  
(510) 337-7871  
Fax (510) 337-7877

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STATEMENT BY APPLICANT

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Application Number	09/854,142
Filing Date	May 10, 2001
First Named Inventor	Ilse Bartk
Group Art Unit	1651
Examiner Name	Jon P. Weber
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## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			

## FOREIGN PATENT DOCUMENTS

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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	01	<b>Barde et al.</b> (1980) Sensory neurons in culture: changing requirements for survival factors during embryonic development. Proc. Natl. Acad. Sci. USA. 77:1199-1203	
	02	<b>Bothwell</b> (1995) Functional interactions of neurotrophins and neurotrophin receptors. Annu. Rev. Neurosci. 18:223-253	
	03	<b>Cannella et al.</b> (1998) The neuregulin, glial growth factor 2, diminishes autoimmune demyelination and enhances remyelination in a chronic relapsing model for multiple sclerosis. Proc. Natl. Acad. Sci. USA. 95:10100-10105	
	04	<b>Carter et al.</b> (1997) Neurotrophins live or let die: does p75NTR decide? Neuron. 18: 187-190	
	05	<b>Charlton et al.</b> (1995) The Th1/Th2 balance in autoimmunity. Curr. Opin. Immunol. 7:793-798	
	06	<b>De Simone et al.</b> (1996) mRNA for NGF and p75 in the central nervous system of rats affected by experimental allergic encephalomyelitis. Neuropathol. Appl. Neurobiol. 22:54-59	
	07	<b>Dugan, et al.</b> (1997) Rapid suppression of free radical formation by nerve growth factor involves the mitogen-activated protein kinase pathway. Proc. Natl. Acad. Sci. USA. 94:4086-4091	
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	09	<b>Gadient et al.</b> (1990) Interleukin-1 beta and tumor necrosis factor-alpha synergistically stimulate nerve growth factor (NGF) release from cultured rat astrocytes. Neurosci. Lett. 117:335-340	

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10	<b>Genain et al.</b> (1995) Antibody facilitation of multiple sclerosis-like lesions in a non human primate. J. Clin. Invest. 96:2966-2974
11	<b>Genain et al.</b> (1999) Identification of autoantibodies associated with myelin damage in multiple sclerosis. Nat. Med. 5:170-175
12	<b>Hohlfeld</b> (1997) Biothechnological agents for the immunotherapy of multiple sclerosis. Principles, problems and perspectives. Brain. 120:865-916 [Abstract].
13	<b>Kossmann et al.</b> (1996) Interleukin-6 released in human cerebrospinal fluid following traumatic brain injury may trigger nerve growth factor production in astrocytes. Brain Res. 713:143-152
14	<b>Kramer et al.</b> (1995) Gene transfer through the blood-nerve barrier: NGF-engineered neuritogenic T lymphocytes attenuate experimental autoimmune neuritis. Nat. Med. 1:1162-1166
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20	<b>Steinman,</b> (2000) Multiple approaches to multiple sclerosis. Nat. Med. 6:15-16
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22	<b>Urschel et al</b> (1990) Schwann cell-neuronal interactions in the rat involve nerve growth factor. J. Comp. Neurol. 296:114-122
23	<b>Villoslada et al.</b> (2000) Human nerve growth factor protects common marmosets against autoimmune encephalomyelitis by switching the balance of T helper cell type 1 and 2 cytokines within the central nervous system. J. Exp. Med., 191(10): 1799-1806
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	AA	5,210,185		Della valle et al.	05-13-1993	

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	AB	WO	93/03140			02-18-1993		
	AC	WO	97/17087			05-15-1997		
	AD	EP	0 731 108			09-11-96		

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

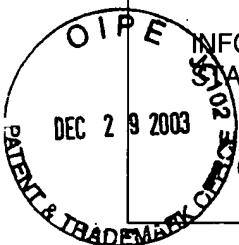
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	AE	Unger et al., (1995) Poster: <u>25<sup>th</sup> Annual Meeting Society for Neuroscience, San Diego, California, USA, November 11-16, 1995</u> (Presentation time: November 12, 1995); "Time course of regeneration in the adult pig brain following lysolecithin-induced demyelination."	
	AF	Miller, et al., (1996) <i>Brain Pathology</i> 6:331-34, "Central nervous system remyelination – clinical application of basic neuroscience principles".	
	AG	Koliatsos, et al., (1990) <i>The Journal of Neuroscience</i> 10(12):3801-3813, "Mouse nerve growth factor prevents degeneration of axotomized basal forebrain cholinergic neurons in the monkey".	
	AH	McMorris and McKinnon, (1996) <i>Brain Pathology</i> , 6:313-329 "Regulation of oligo dendrocyte development and CNS myelination by growth factors: prospects for therapy of demyelinating disease."	
	AI	Kramer, et al., (1995) <i>Nature Medicine</i> , vol. 1, No. 11:1162-1166, "Gene transfer through the blood-nerve barrier: NGF-engineered neuritogenic T lymphocytes attenuate experimental autoimmune neritis."	

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AJ	Althaus, et al., (1992) <i>Neuroscience Letters</i> 135:219-223, "Nerve growth factor induces proliferation and enhances fiber regeneration in oligodendrocytes isolated from adult pig brain."	
AK	Gage, et al., (1988) <i>The Journal of Comparative Neurology</i> , 269:147-155, "Morphological respnse of axotomized septal neurons to nerve growth factor."	
AL	Hefti et al, (1984) <i>Brain Research</i> 293:305-311, "Chronic intraventricular injections of nerve growth factor elevate hippocampal choline acetyltransferase activity in adult rats with partial septo-hippocampal lesions."	
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AN	Crain and Patterson, (1974) <i>Brain Research</i> , 79:145-152, "Enhanced afferent synaptic functions in fetal mouse spinal cord-sensory ganglion explants following NGF-induced ganglion hypertrophy."	
AO	Chun and Patterson, (1977) <i>The Journal of Cell Biology</i> , vol. 75, pp. 596-704, "Role of nerve growth factor in the development of rat sympathetic neurons in vitro - I. Survival, growth and differentiation of catecholomine production."	
AP	Chun and Patterson, (1977) <i>The Journal of Cell Biology</i> , vol. 75, pp. 704-711, "Role of nerve growth factor in the development of rat sympathetic neurons in vitro - II. Developmental studies."	
AQ	Levi-Montalcini and Angeletti, (1963) <i>Developmental Biology</i> , 7:653-659, "Essential role of the nerve growth factor in the survival and maintenance of dissociated sensory and sympathetic embryonic nerve cells in vitro."	
AR	Massacesi, et al., (1995) <i>Annals of Neurology</i> , vol. 37, No. 4, pp. 519-530, "Active and passively induced experimental autoimmune encephalomyelitis in common marmosets: A new model for mulple sclerosis."	
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AW	Diaz-Cintra, et al., (1995) <i>Cell Transplantation</i> , Vol. 4, No. 5, pp. 505-513, "Morphometric study of fetal brain transplants in the insular cortex and NGF effects on neuronal and glial development."
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